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| 10/608,722 | 06/26/2003 | Silas W. Dunsmore | 1352-2 | 6916 |

7590 12/15/2005
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EXAMINER

MYINT, DENNIS Y

| ART UNIT | PAPER NUMBER |
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2162

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,722

Applicant(s)

DUNSMORE ET AL.

Examiner

Dennis Myint

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/26/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-54 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1-14, 16-42, and 44-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Hensley (U.S. Patent Application Publication Number 2004/0133790).

As per claim 1, Hensley is directed to a system and method for exchanging a first sub-hierarchy of at least two sub-hierarchies of a hierarchical file system (HFS) (Hensley Paragraph 0018 and Figure 2) with a second sub-hierarchy of the at least two sub-hierarchies (Paragraph 0018 “a protected, hidden, emergency boot directory containing a back-up copy of a computer operating system” and Paragraph 0022), the HFS being accessible by at least one processor (Paragraph 0017-0018) and having a root directory that is a parentless directory (Paragraph 0022), the method comprising the steps of:

providing for the first sub-hierarchy to include a first root directory stored in a first location occupied by the root directory of the HFS and a first plurality of files configured to branch therefrom (Paragraph 0022) ;

providing for the second sub-hierarchy to include a second root directory stored in a second location ("new emergency boot directory hierarchy") of the HFS that is not occupied by the root directory of the HFS and a second plurality of files configured to branch (Paragraph 0022) therefrom; and

providing for relocation of the second root directory to the first location (Paragraph 0025).

Claim 23 and 29 are rejected on the same basis as claim 1.

As per claim 2, Hensley is directed to the system and method of claim 1, further, further comprising the step of providing for configuration of the second plurality of files to branch from the second root directory including while the second root directory is located in the first location (Paragraph 0025-0026 and Paragraph 0030).

Claim 30 is rejected on the same basis as claim 2.

As per claim 3, Hensley is directed to the system and method of claim 1, further comprising the step of providing for relocation of the first root directory to the second location (Paragraph 0025-0026).

Claim 25, 28, and 31 are rejected on the same basis as claim 3.

As per claim 4, Hensley is directed to the system and method according to claim 3, further comprising the step of providing for configuration of the first plurality of files to

Art Unit: 2162

branch from the first root directory including while the first root directory is located in the second location (Paragraph 0025-0026 and Paragraph 0030).

Claim 32, 51 and 53 are rejected on the same basis as claim 4.

As per claim 5, Hensley is directed to the system and method according to claim 1, wherein the first and second sub-hierarchies are mutually exclusive (Paragraph 0022).

Claim 26 and 33 are rejected on the same basis as claim 5.

As per claim 6, Hensley is directed to the system and method according to claim 1, wherein the second location is not occupied by the first sub-hierarchy (Paragraph 0022).

Claim 24 and 34 are rejected on the same basis as claim 6.

As per claim 7, Hensley is directed to the system and method according to claim 1, wherein the providing for relocation step is performed during startup of an operating system executing on the at least one processor (Paragraph 0025 and 0023).

Claim 35 is rejected on the same basis as claim 7.

As per claim 8, Hensley is directed to the system and method according to claim 1, further comprising the step of providing for storage of first and second operating systems executable on the at least one processor in the respective first and second sub-hierarchies (Paragraph 0022).

Claim 36 is rejected on the same basis as claim 8

As per claim 9, Hensley is directed to the system and method according to claim 1, further comprising the step of providing for a replacement of the first sub-hierarchy with the second sub-hierarchy (Paragraph 0022, 0023, 0025, and 0026).

Claim 37 is rejected on the same basis as claim 9.

As per claim 10, Hensley is directed to the system and method according to claim 1, further comprising the step of providing for an exchange of the first and second sub-hierarchies (Paragraph 0023 and Paragraph 0025-0027).

Claim 38, 52 and 54 are rejected on the same basis as claim 10.

As per claim 11, Hensley is directed to the system and method according to claim 1, further comprising the step of preventing unauthorized access by an operating system executed on the at least one processor to the HFS other than to the sub-hierarchy of the at least two sub-hierarchies having its root directory located in the first location before and after an exchange (Paragraph 0028).

Claim 39 is rejected on the same basis as claim 11.

As per claim 12, Hensley is directed to the system and method according to claim 1, further comprising the step of providing for configuration of the second plurality of files to branch from the first root directory and the first plurality of files to branch from the second root directory (Paragraph 0025-0026 and Paragraph 0030).

Claim 40 is rejected on the same basis as claim 12.

As per claim 13, Hensley is directed to the system and method according to claim 1, wherein the providing for relocation step further includes the steps of:

providing for reconfiguration of one or more pointers pointing between the second root directory and a parent directory of the second root directory to point between the first root directory and the parent directory of the second root directory (Paragraph 0023, 0025-0027, and 0029);

providing for configuration of the second root directory to conform with configuration of the root directory of the HFS (Paragraph 0023, 0025-0027, and 0029);
and

providing for an exchange of contents and associated data of the first root directory and the second root directory (Paragraph 0023, 0025-0027, and 0029).

Claim 41 is rejected on the same basis as claim 13.

As per claim 14, Hensley is directed to the system and method of claim 1, wherein the HFS resides upon a storage medium selected from the group consisting of physical and virtual storage mediums (Paragraph 0022).

Claim 27 and 42 are rejected on the same basis as claim 14.

As per claim 16, Hensley is directed to the system and method according to claim 10, further comprising the step of providing for another exchange of the first and second sub-hierarchies with the effect of returning the first and second sub-hierarchies to their original locations ("if the enumeration does not reference the emergency boot directory...", Paragraph 0020).

Claim 44 is rejected on the same basis as claim 16.

As per claim 17, Hensley is directed to the system and method according to claim 10, wherein the providing for the exchange step is performed without copying contents of the first and second plurality of files (Paragraph 0023).

Claim 45 is rejected on the same basis as claim 17.

As per claim 18, Hensley is directed to the system and method according to claim 1, further comprising the step of providing at least one special file ("file system filter" Paragraph 0018) accessible via the root directory of the HFS and via one of the first and second root directories when stored in the first location (Paragraph 0018).

Claim 46 is rejected on the same basis as claim 18.

As per claim 19, Hensley is directed to the system and method according to claim 10, wherein the contents of the first sub-hierarchy include an upgrade of contents of the second sub-hierarchy (Paragraph 0030).

Claim 47 is rejected on the same basis as claim 19.

As per claim 20, Hensley is directed to the system and method according to claim 10, wherein the exchange is reversible (Paragraph 0019-0020, 0023-0025, and 0030).

Claim 48 is rejected on the same basis as claim 20.

As per claim 21, Hensley is directed to the system and method according to claim 10, wherein the first and second sub-hierarchies provide different user environments (Paragraph 0028). The system and method taught by Hensley accommodates multi-user environments.

Claim 19 is rejected on the same basis as claim 21.

Art Unit: 2162

As per claim 22, Hensley is directed to the system and method 22 according to claim 10, wherein contents of the second sub-hierarchy are a backup copy of contents of the first sub-hierarchy (Paragraph 0015).

Claim 50 is rejected on the same basis as claim 22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2162

3. Claim 15 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hensley in view of Mansur et al. (U.S. Patent Application Publication Number 2002/0095548

Referring to claim 15, Hensley is directed to the system and method of claim 1 but failed to expressly disclose that said system and method comprises the step of providing a backup directory branching from the root directory of the HFS and not included in the at least two sub-hierarchies. However, Mansur et al. teaches a system and method for storage system controller configuration wherein a backup directory, containing more directories inside, is used (Mansur et al., Paragraph 0045).

A the time the invention was made, it would have been obvious to a person of ordinary skill in the art to add the feature of employing backup directories as taught by Mansur et al. to the system and method taught by Hensley as applied to claim 1 so that the resultant system and method would provide a backup directory branching from the root directory of the HFS and not included in the at least two sub-hierarchies, from which branch respective sub-hierarchies of the at least two sub-hierarchies other than the sub-hierarchy of the at least two sub-hierarchies having its root directory located in the first location. One would have been motivated to do so in order to simply "to restore the directory in the event the primary directory location or primary lock becomes corrupted" (Mansur et al., Paragraph 0045).

Claim 43 is rejected on the same basis as claim 15.

Conclusion

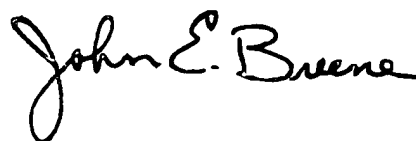
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Myint whose telephone number is (571) 272-5629. The examiner can normally be reached on 8:30AM-5:30PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dennis Myint

AU-2162



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